

This Page Is Inserted by IFW Operations
and is not a part of the Official Record

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

IMAGES ARE BEST AVAILABLE COPY.

**As rescanning documents *will not* correct images,
please do not report the images to the
Image Problem Mailbox.**

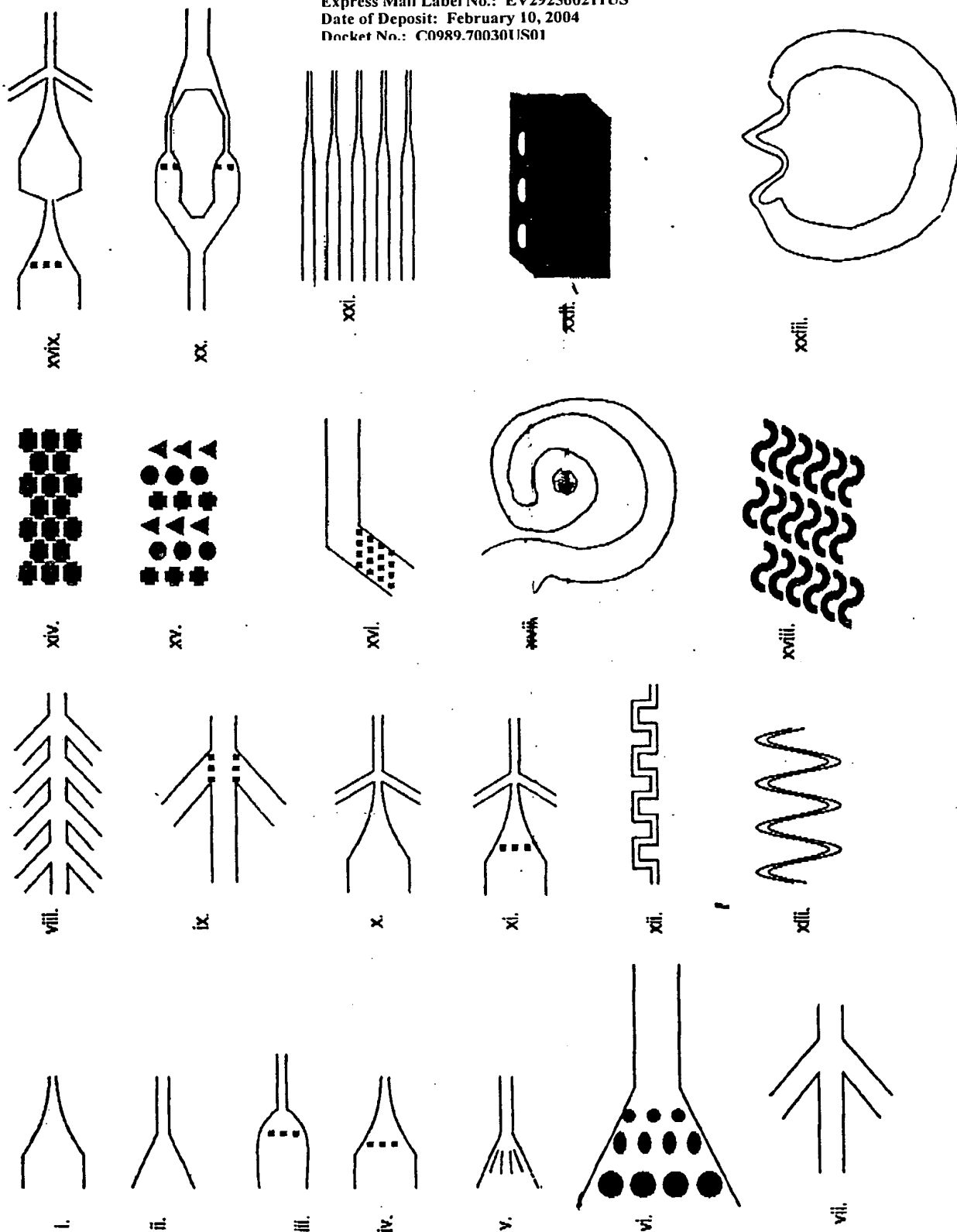


FIG. 1

10066-018

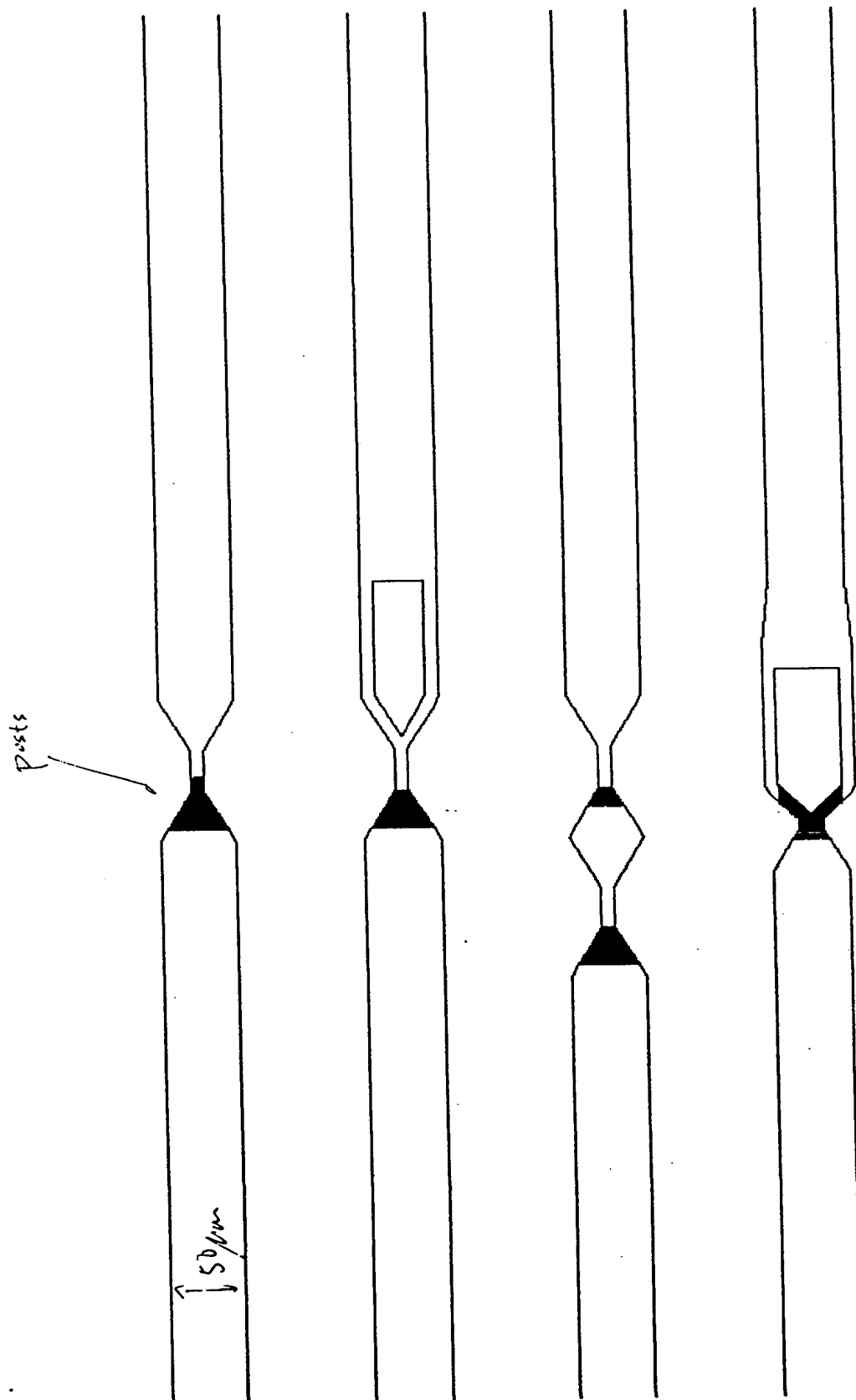


FIG. 2 (a)

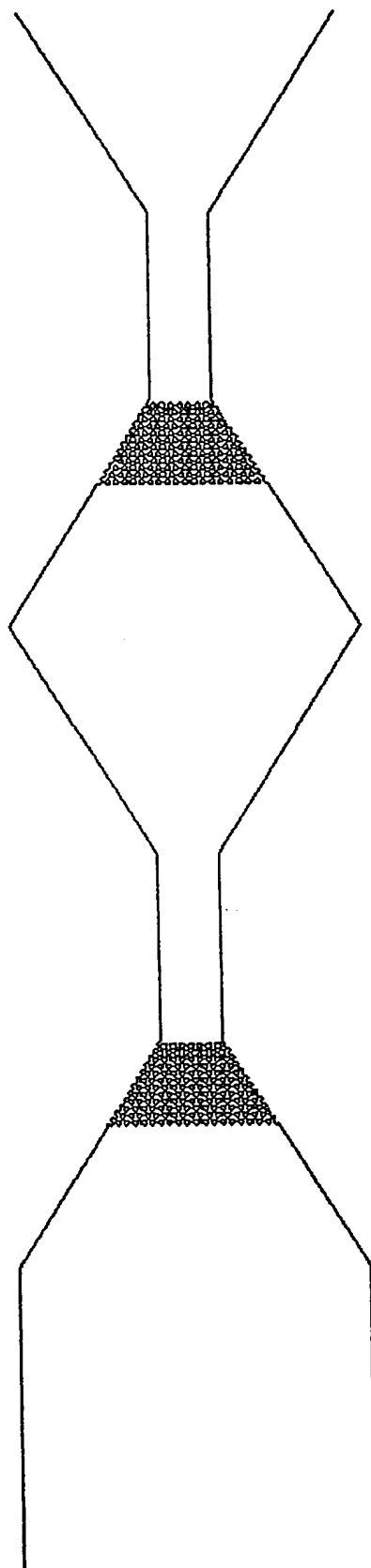


FIG. 2 (b)

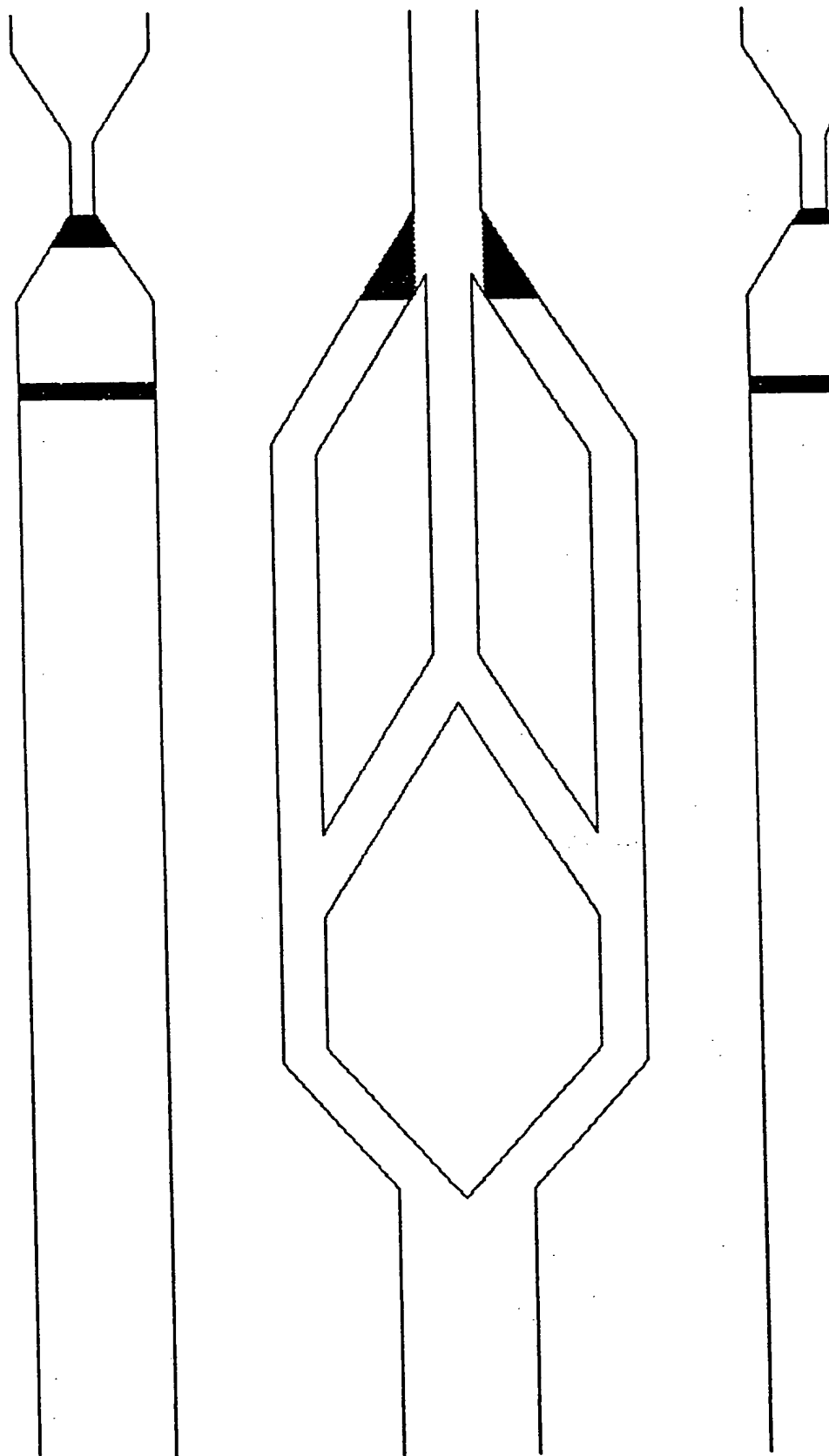


FIG. 2 (c)

METHODS AND APPARATUSES FOR
STRETCHING POLYMERS
Express Mail Label No.: EV292560211US
Date of Deposit: February 10, 2004
Docket No.: C0989.70030US01

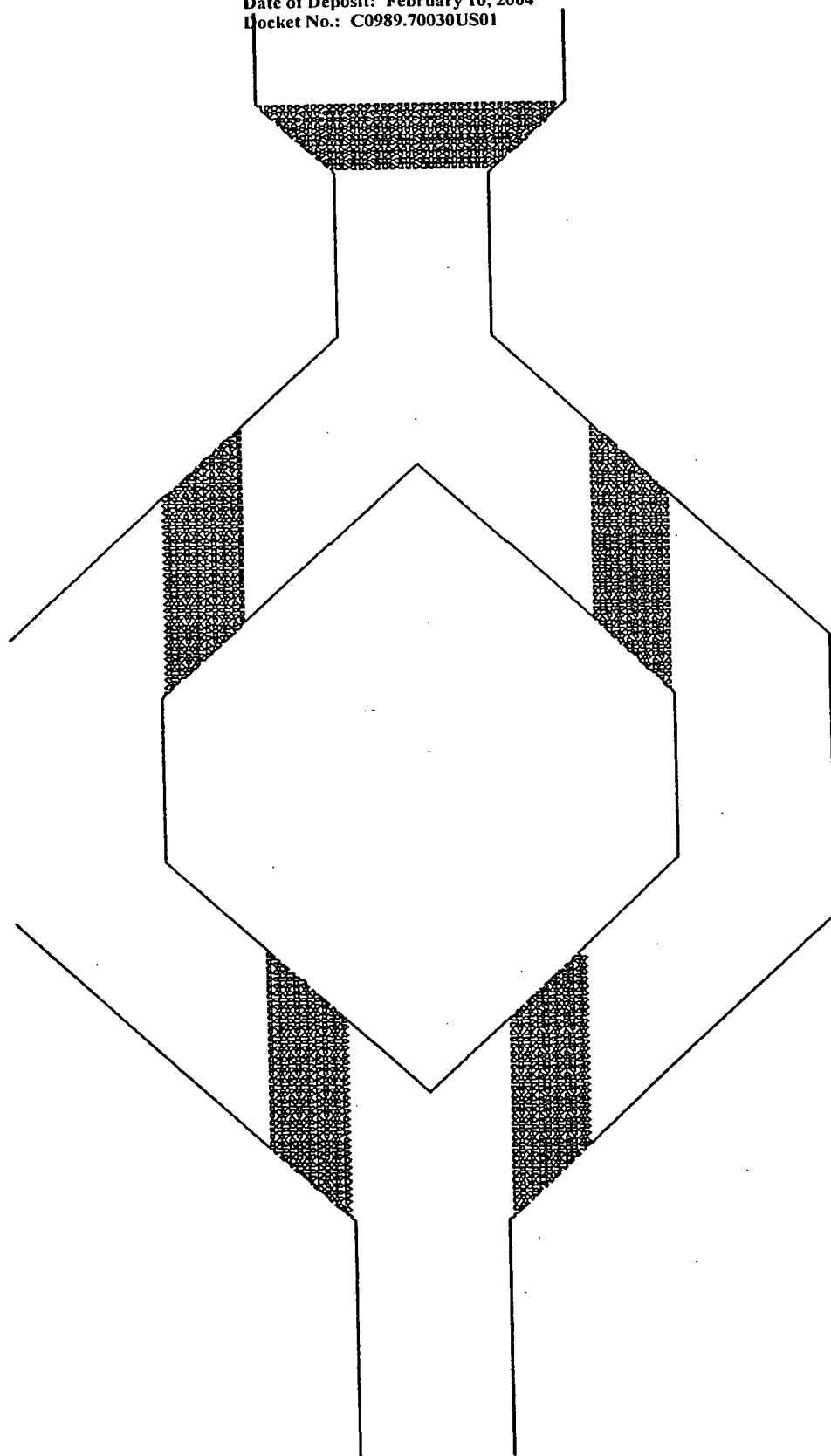


FIG. 2 (d)

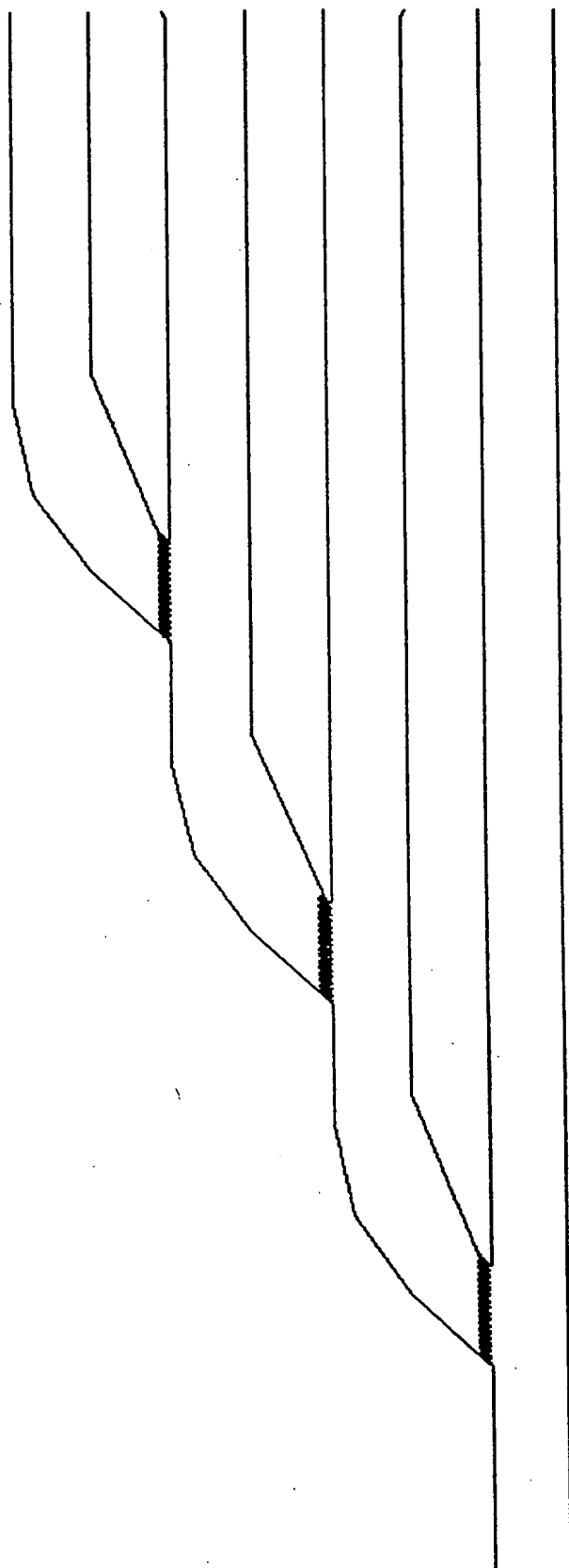


FIG. 2 (e)

METHODS AND APPARATUSES FOR
STRETCHING POLYMERS
Express Mail Label No.: EV292560211US
Date of Deposit: February 10, 2004
Docket No.: C0989.70030US01

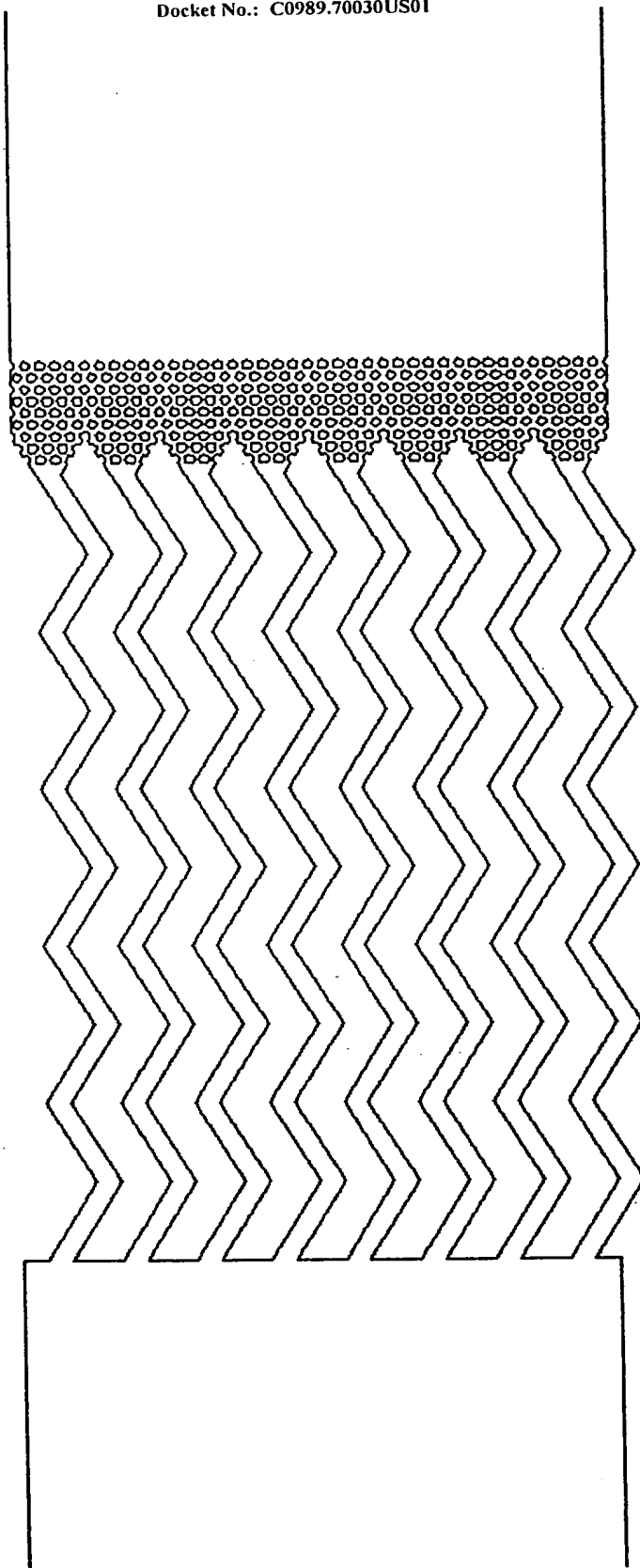


FIG. 2 (f)

METHODS AND APPARATUSES FOR
STRETCHING POLYMERS
Express Mail Label No.: EV292560211US
Date of Deposit: February 10, 2004
Docket No.: C0989.70030US01

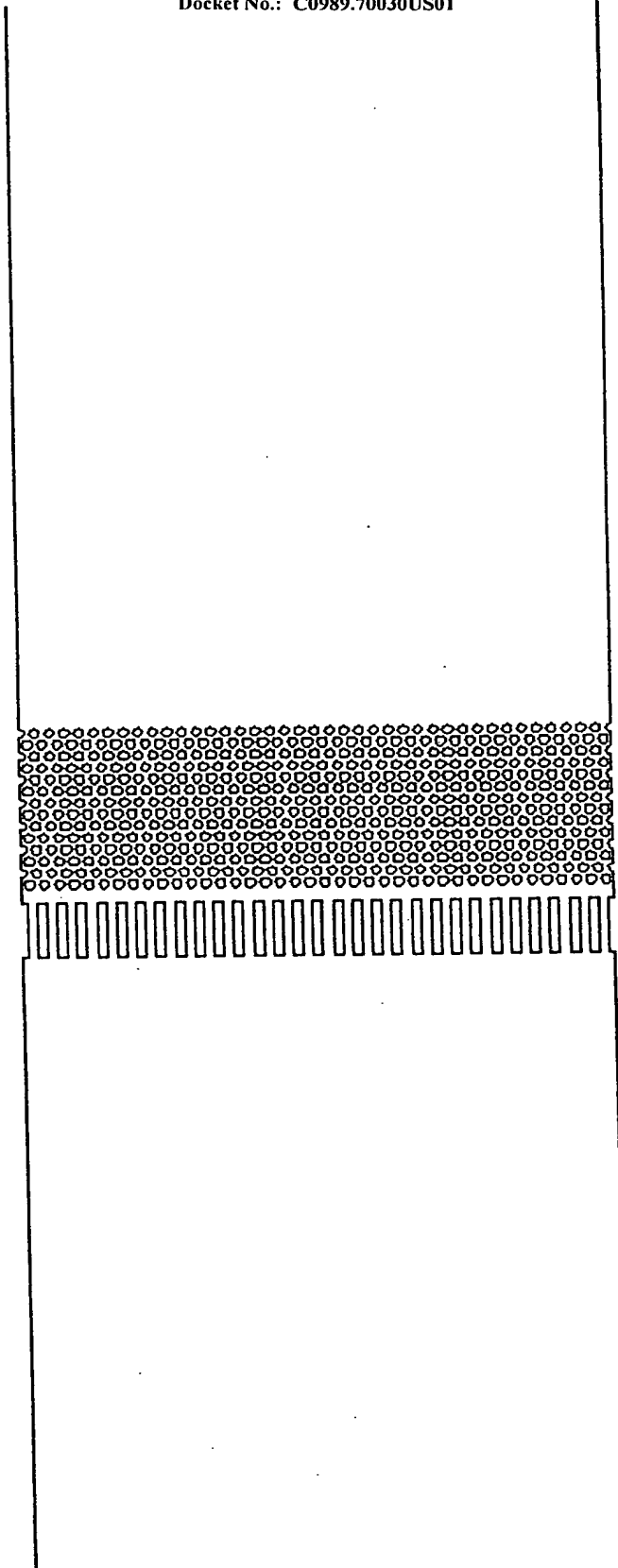


FIG. 2 (g)

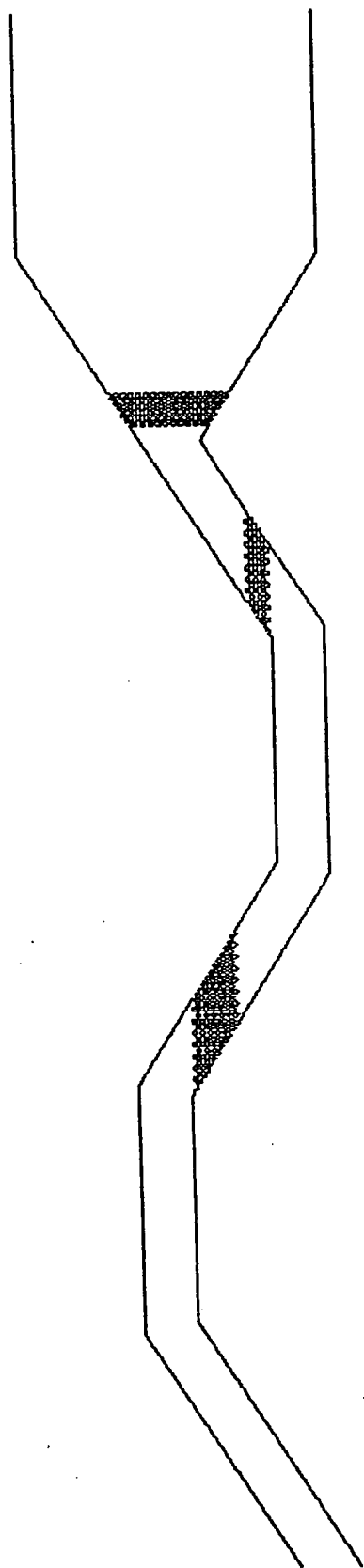


FIG. 2 (h)

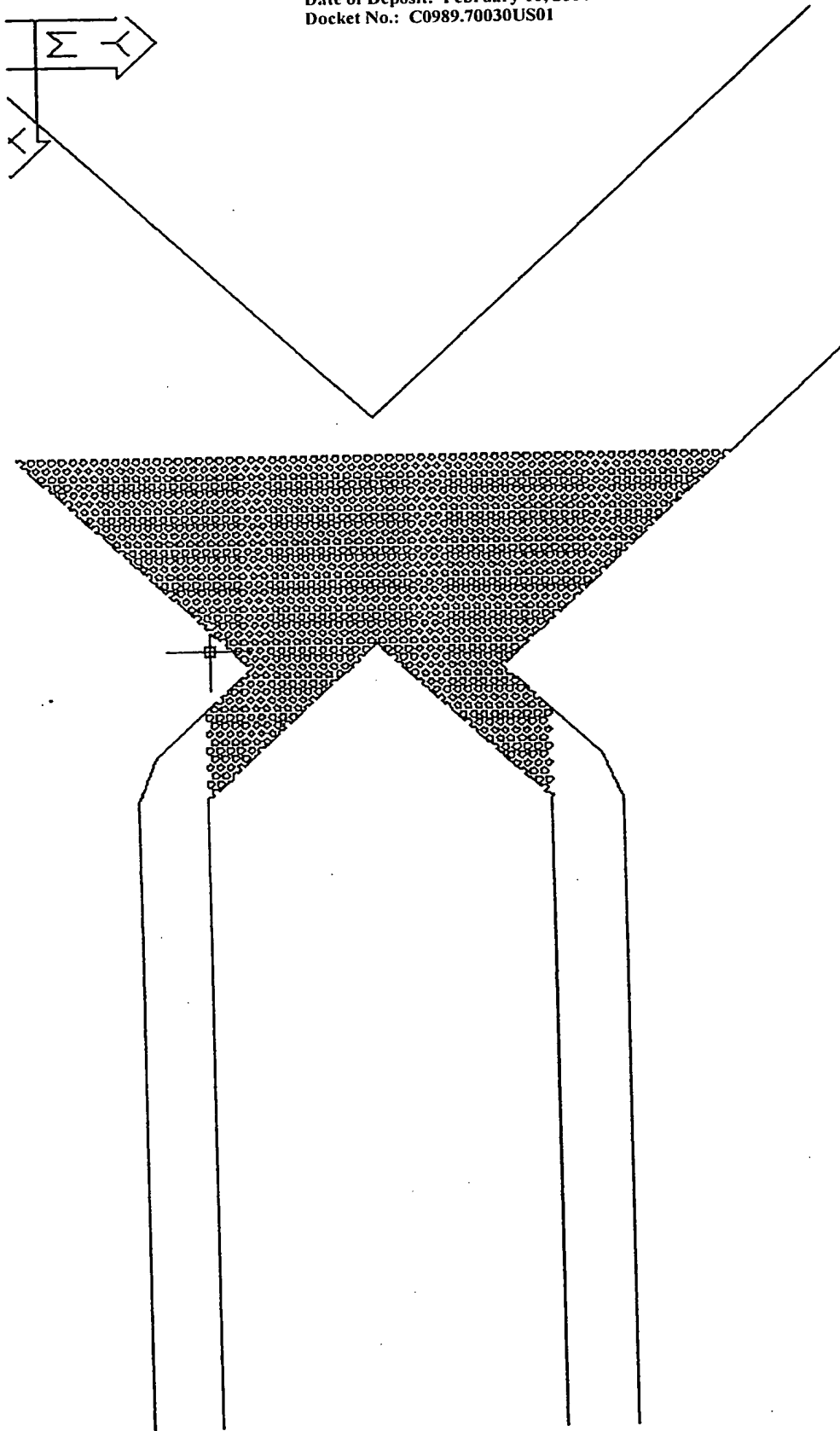


FIG. 2 (i)

10066-018

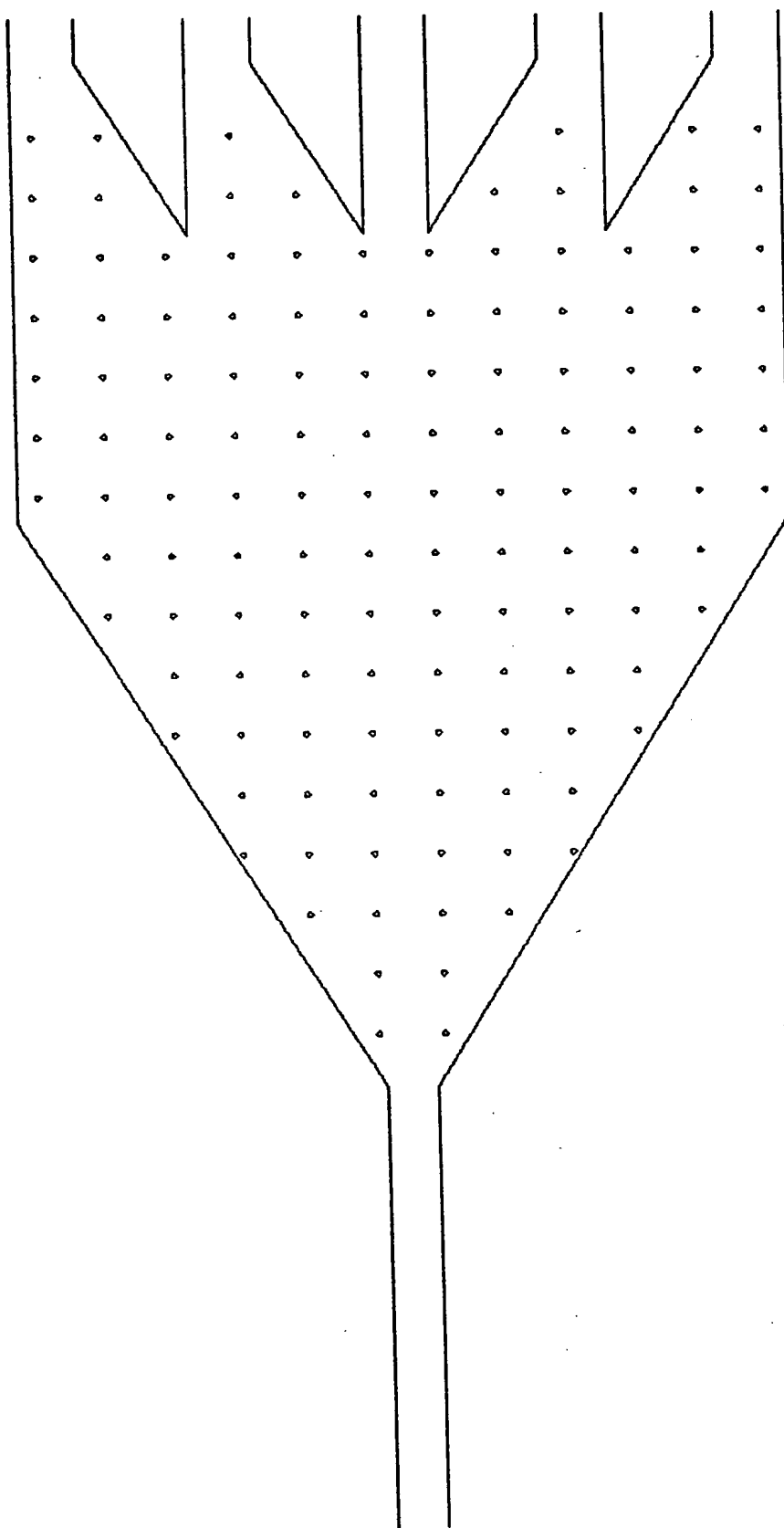


FIG. 2 (j)

10066-018

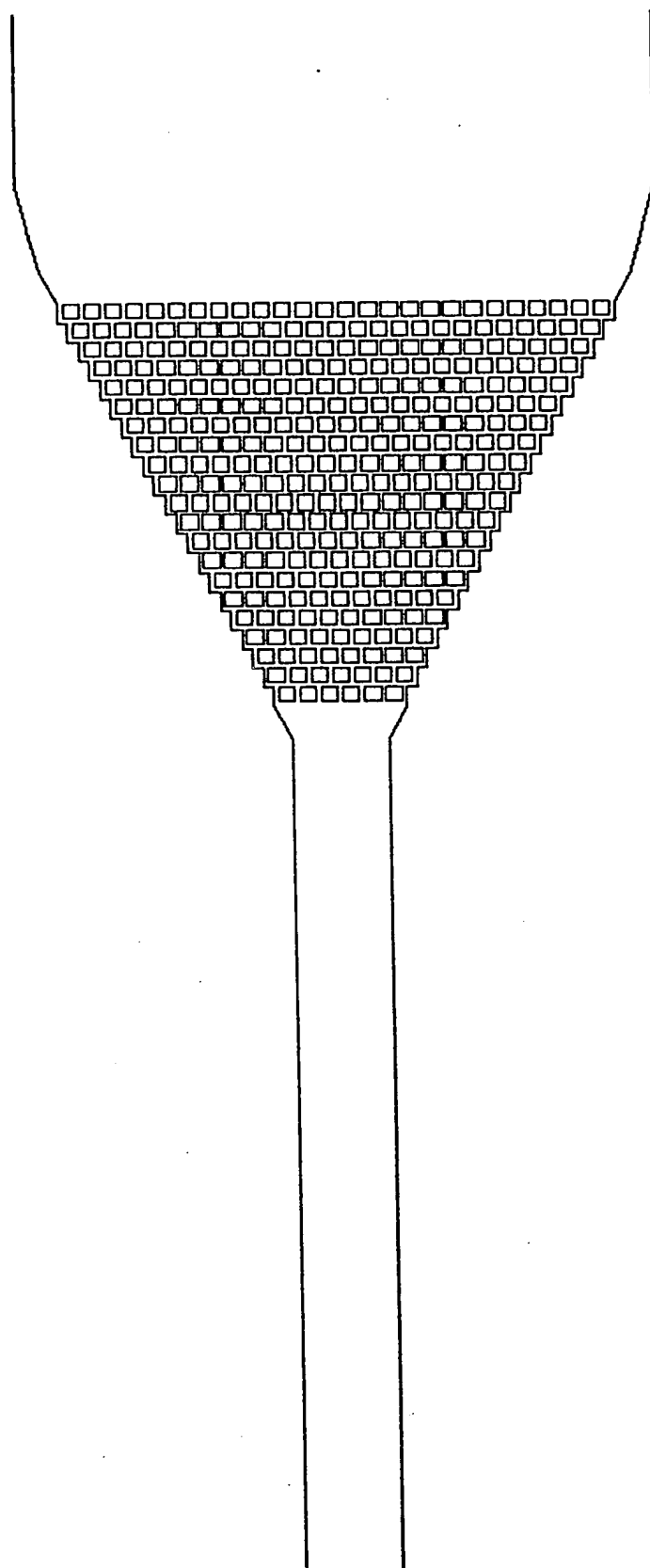


FIG. 2 (k)

10066-018

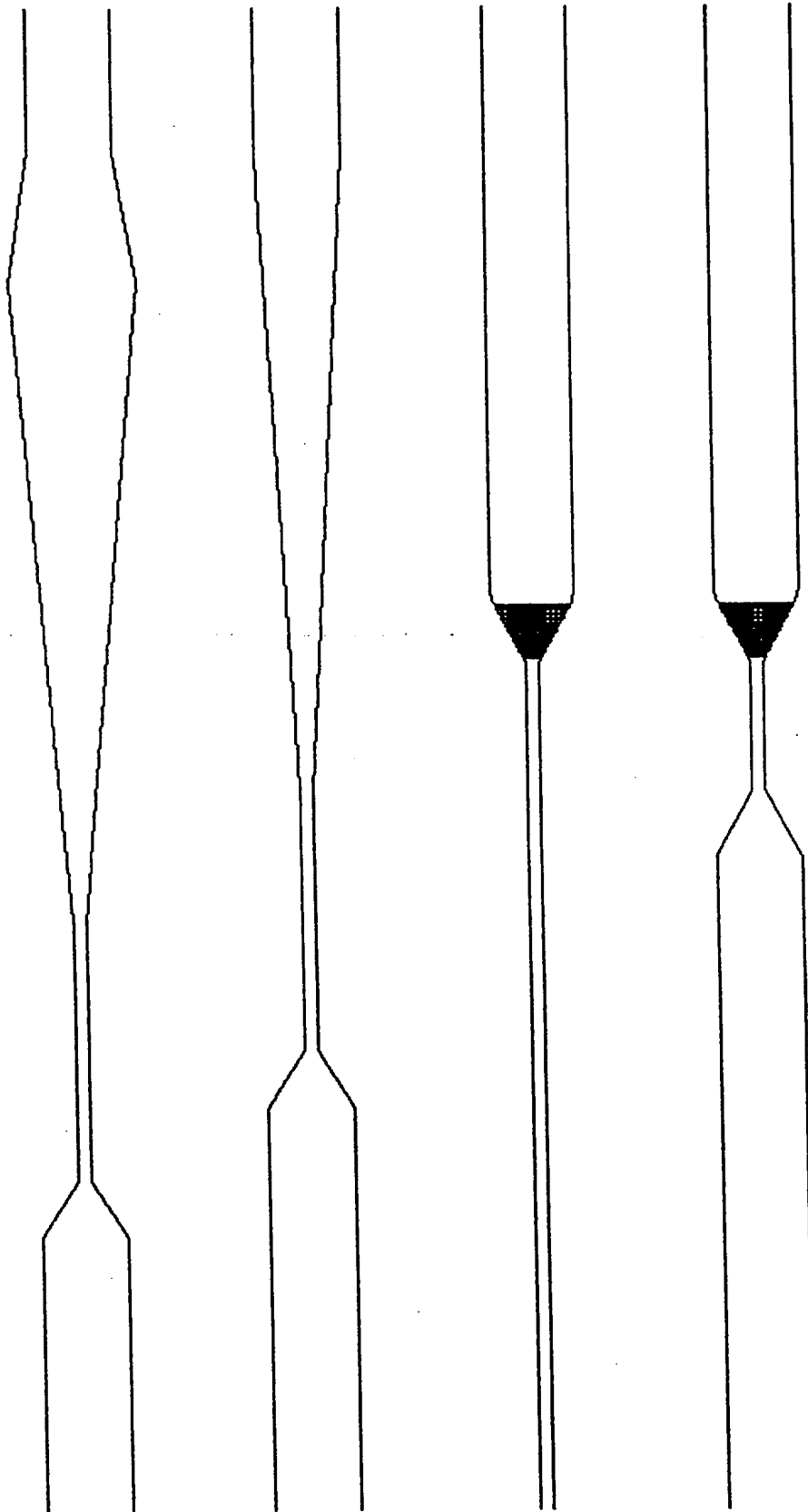


FIG. 2 (I)

10066-018

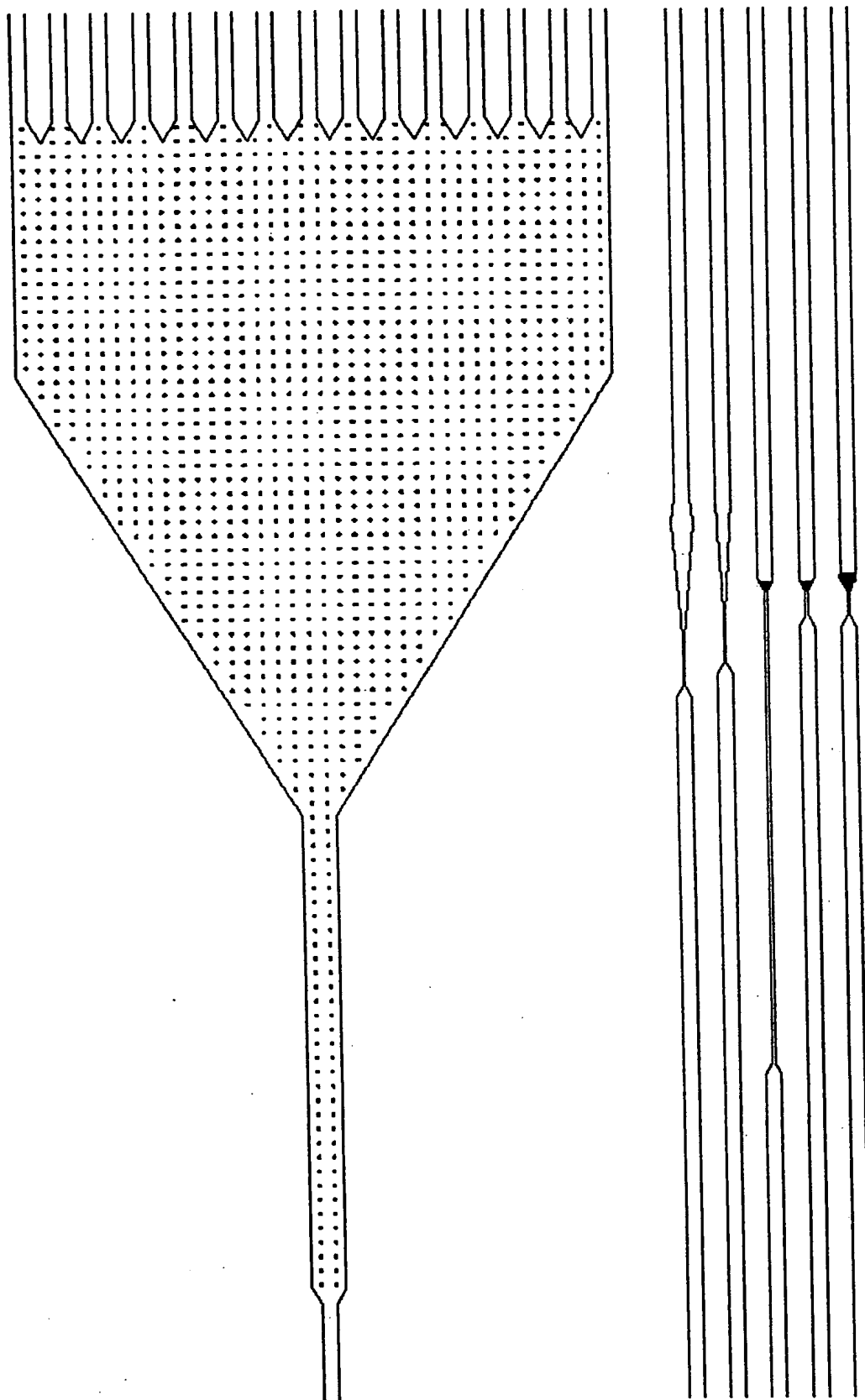


FIG. 2 (m)

10066-018

SHEET 15 OF 34

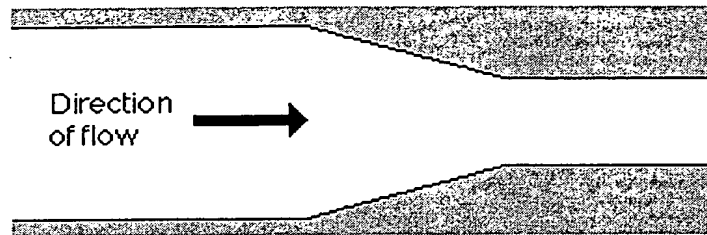


FIG. 3

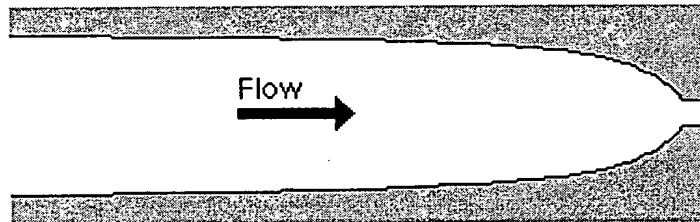


FIG. 4

10066-018

SHEET 16 OF 34

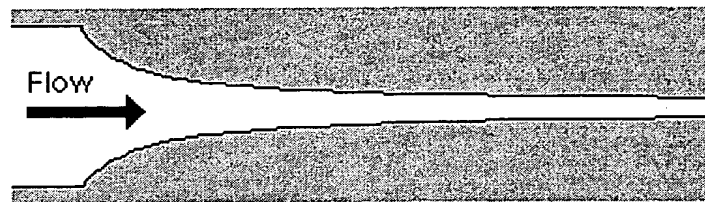


FIG. 5

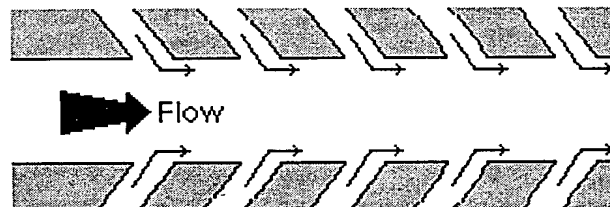


FIG. 6

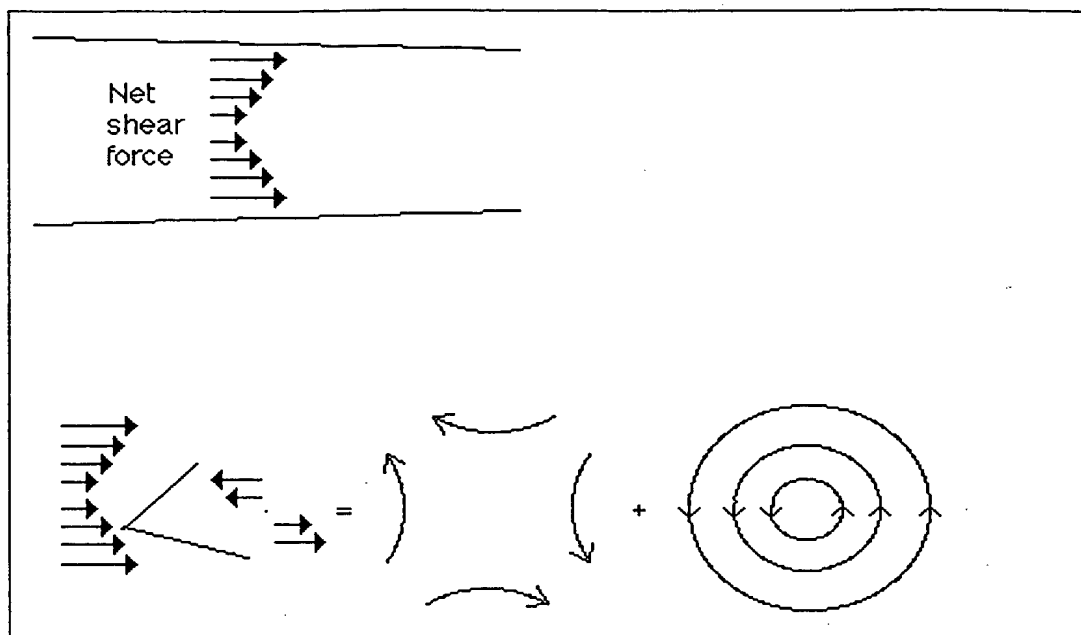


FIG. 7(a)

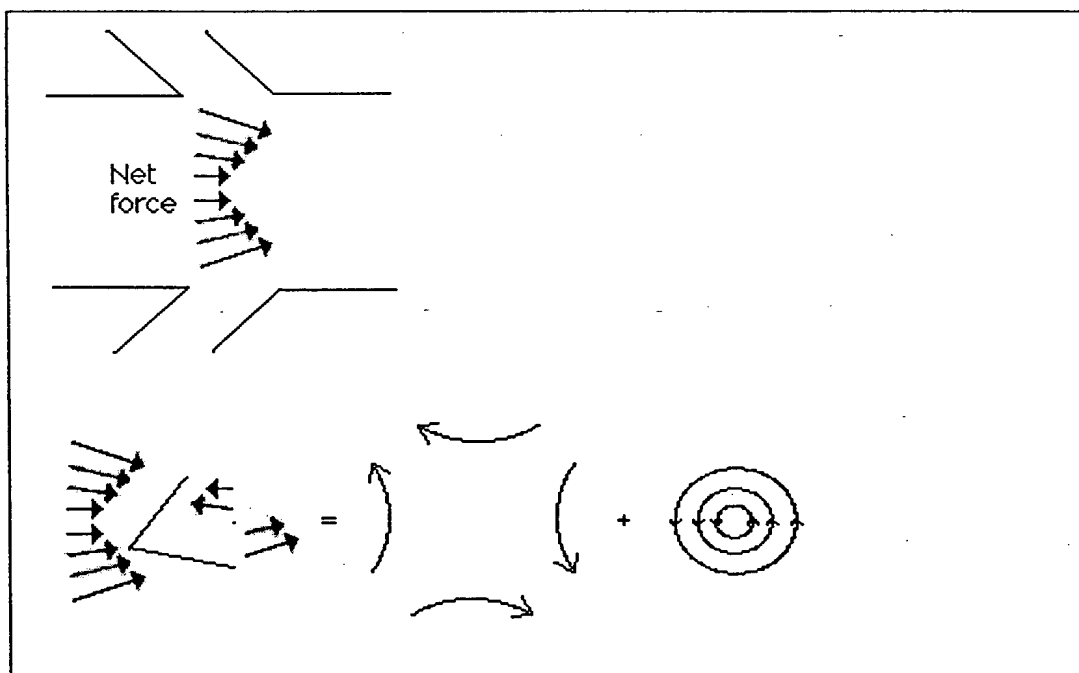


FIG. 7(b)

10066-018

SHEET 18 OF 34

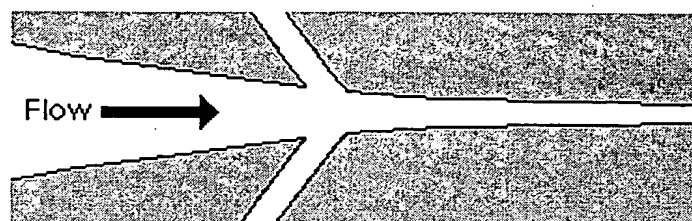


FIG. 8

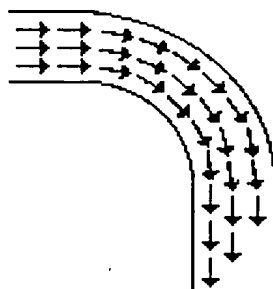


FIG. 9(a)

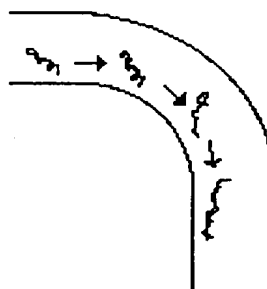


FIG. 9(b)

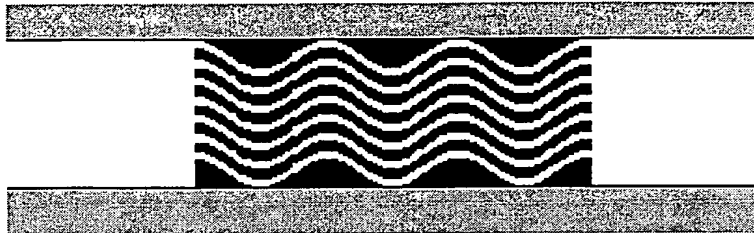


FIG. 10

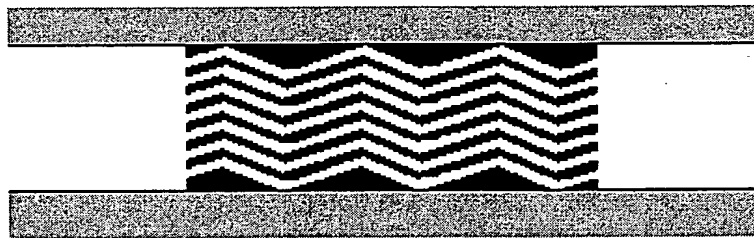


FIG. 11

10066-018

SHEET 20 OF 34

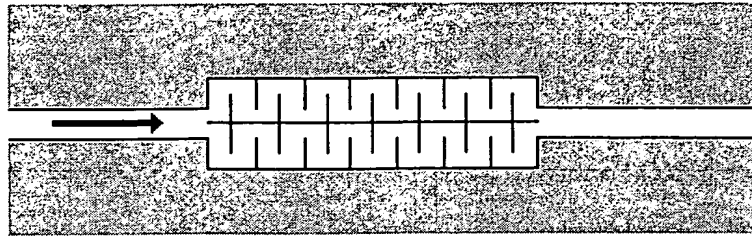


FIG. 12

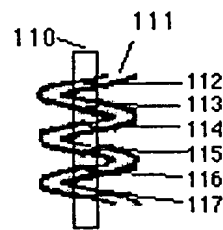


FIG. 13

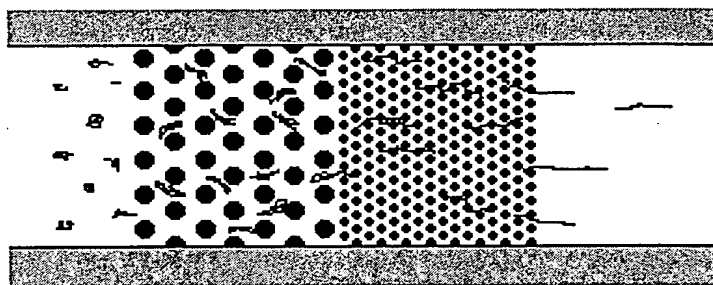
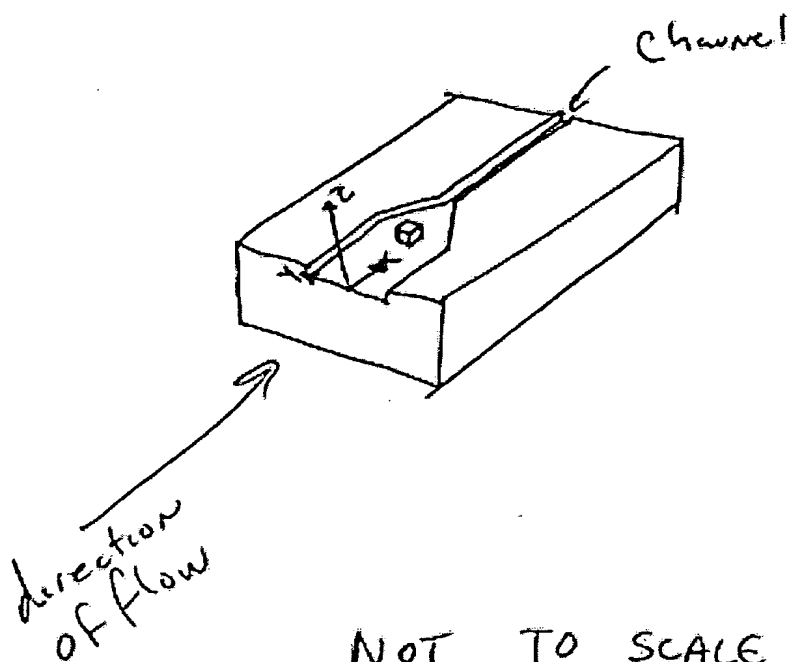


FIG. 14



NOT TO SCALE
SHOWN WITHOUT COVER SLIP

FIG. 15

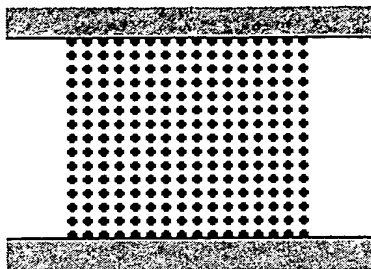


FIG. 16(a)

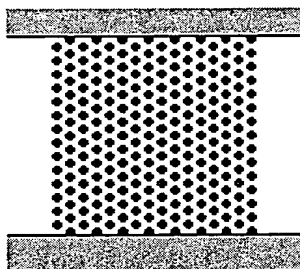


FIG. 16(b)

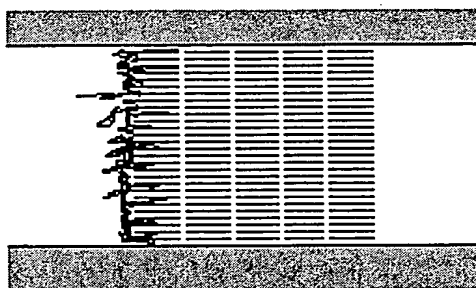


FIG. 17

10066-018

SHEET 23 OF 34

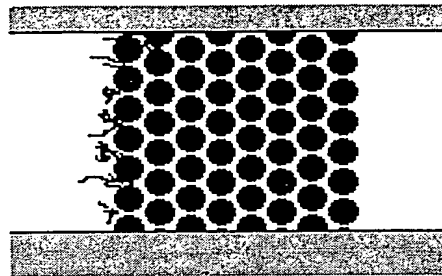


FIG. 18

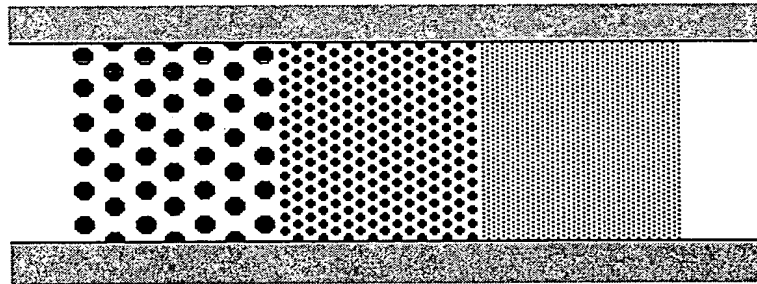


FIG. 19

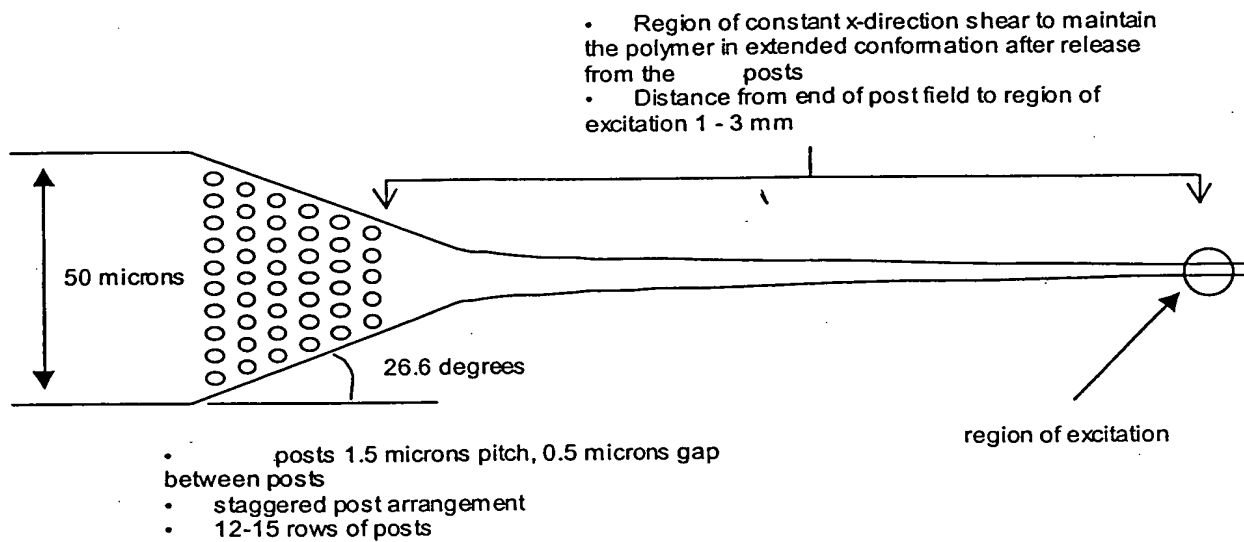
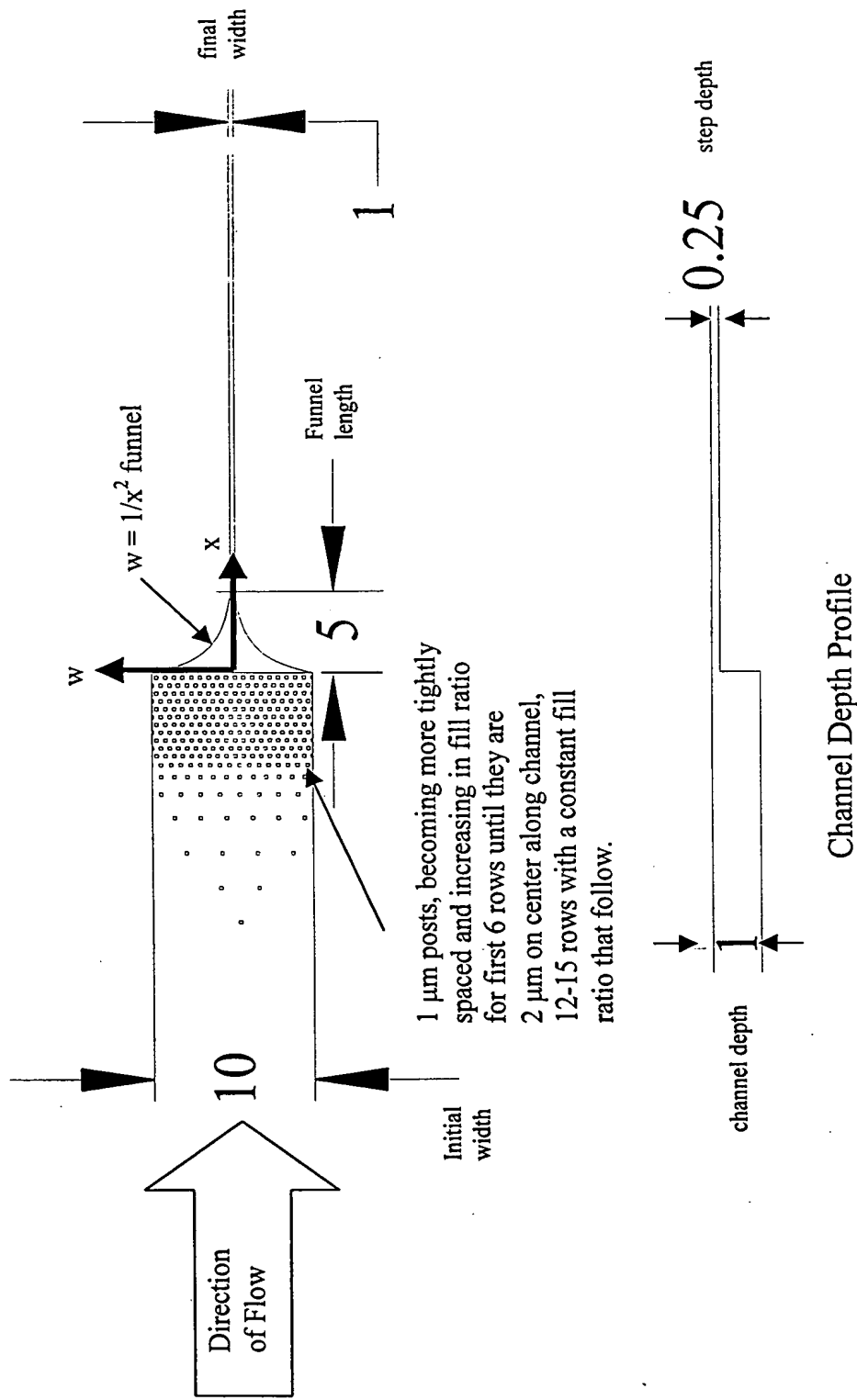


FIG. 20

Preferred Dimensions:

- Initial width / final width > 10
- Funnel length < 0.5*initial width
- Funnel faster than 1/x
- Step depth / channel depth <= 1/4



1 μ m posts, becoming more tightly spaced and increasing in fill ratio for first 6 rows until they are 2 μ m on center along channel, 12-15 rows with a constant fill ratio that follow.

Not To Scale, All Dimensions In

FIG. 21

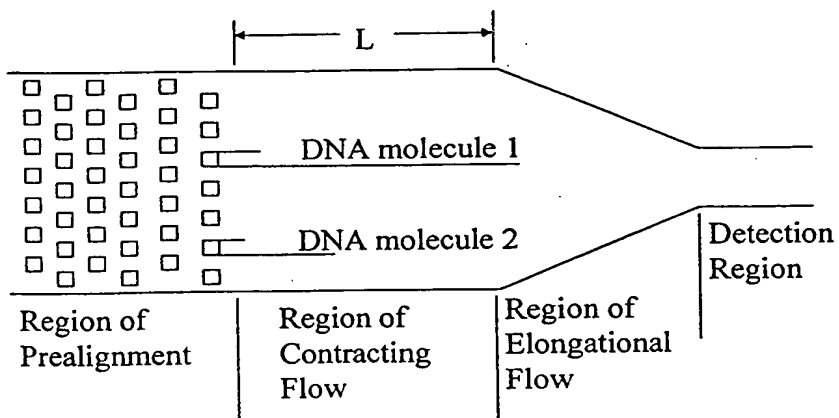


FIG. 22

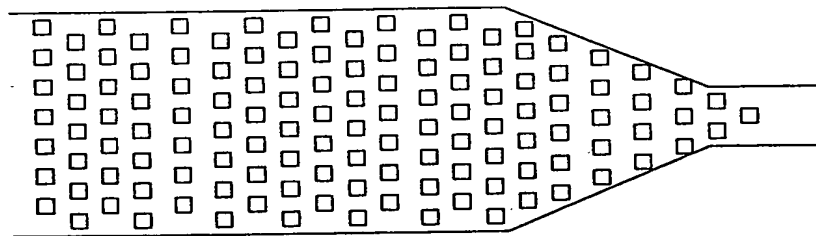


FIG. 23

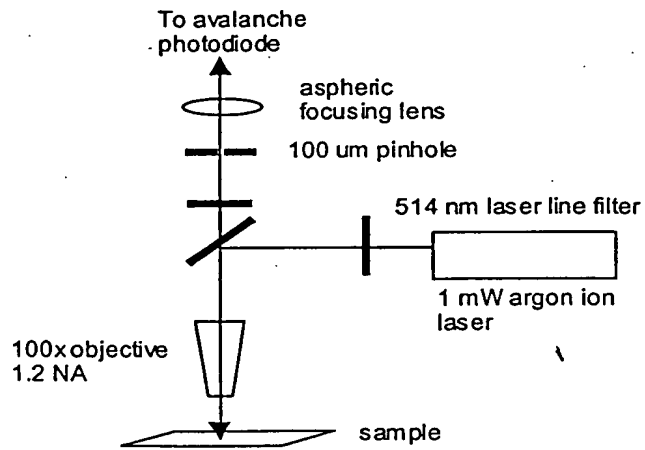


FIG. 24

10066-018

SHEET 28 OF 34

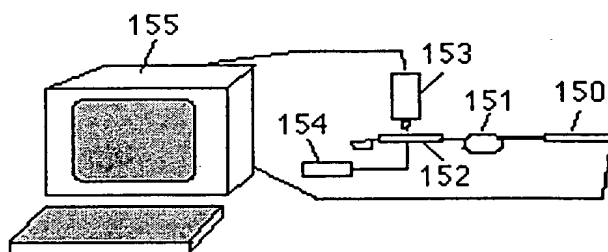


FIG. 25

10066-018

SHEET 29 OF 34

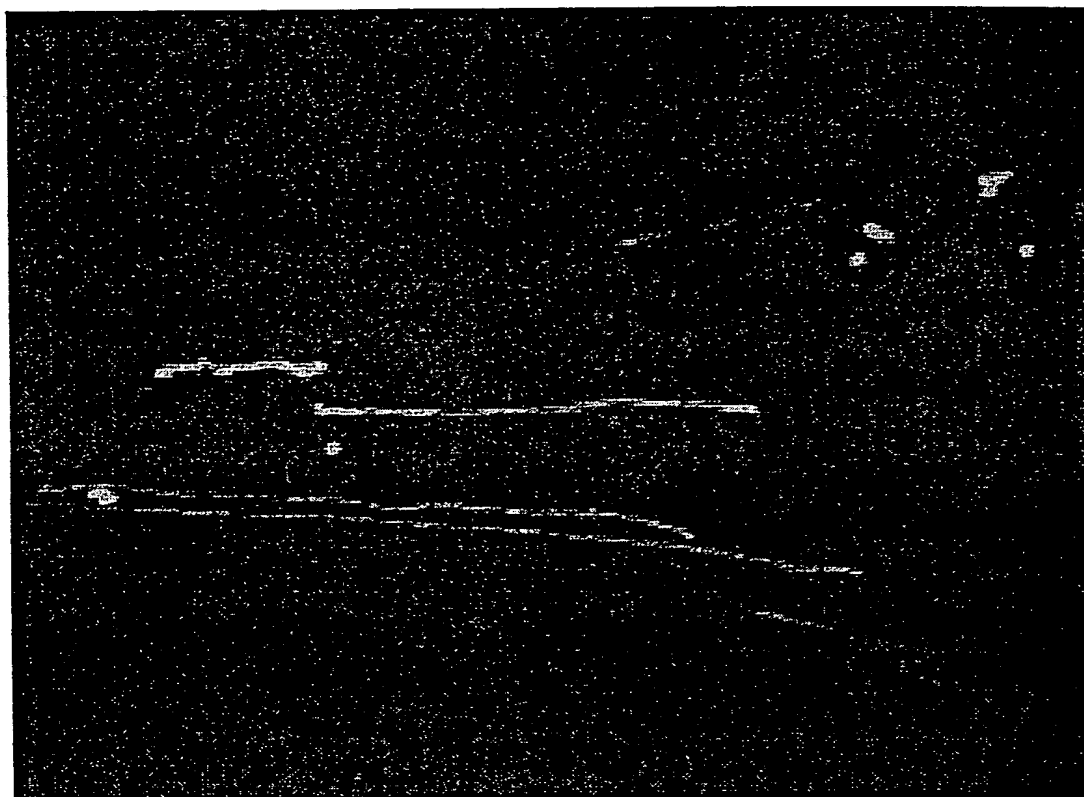


FIG. 26

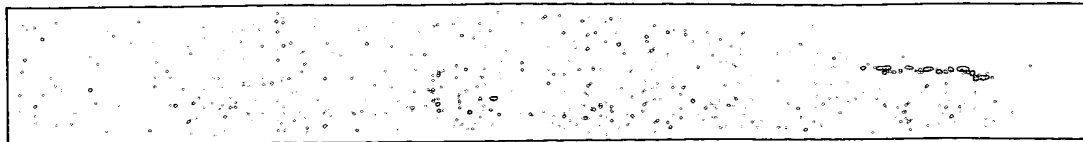


FIG. 27(a)

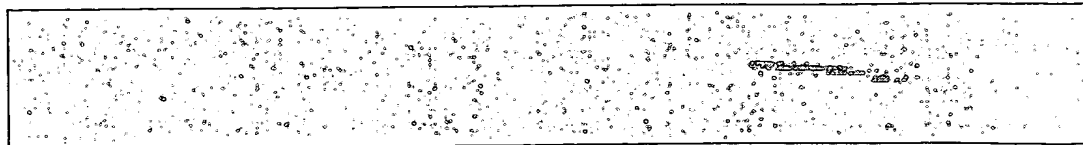


FIG. 27(b)

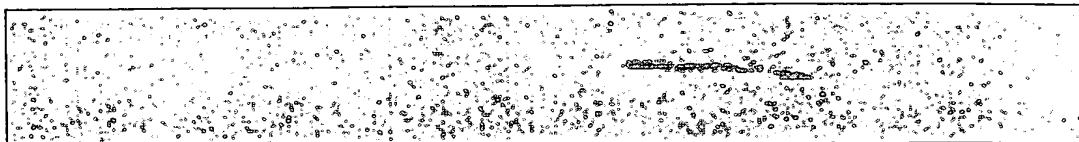


FIG. 27(c)

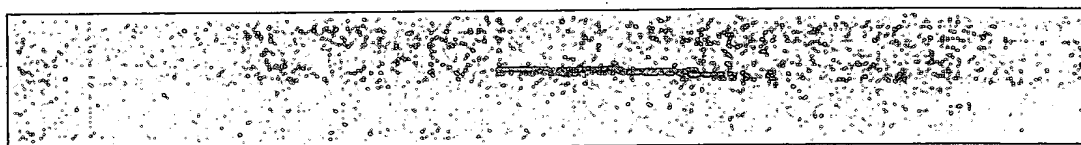


FIG. 27(d)

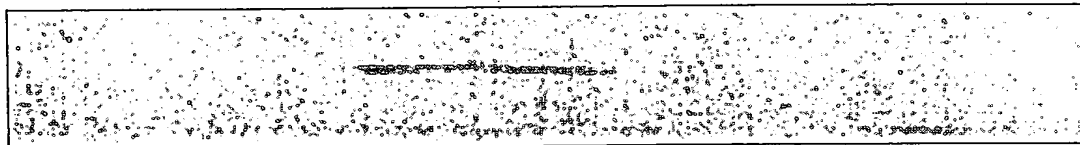


FIG. 27(e)



FIG. 27(f)

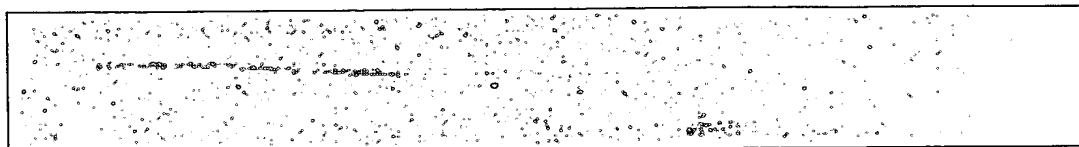


FIG. 27(g)

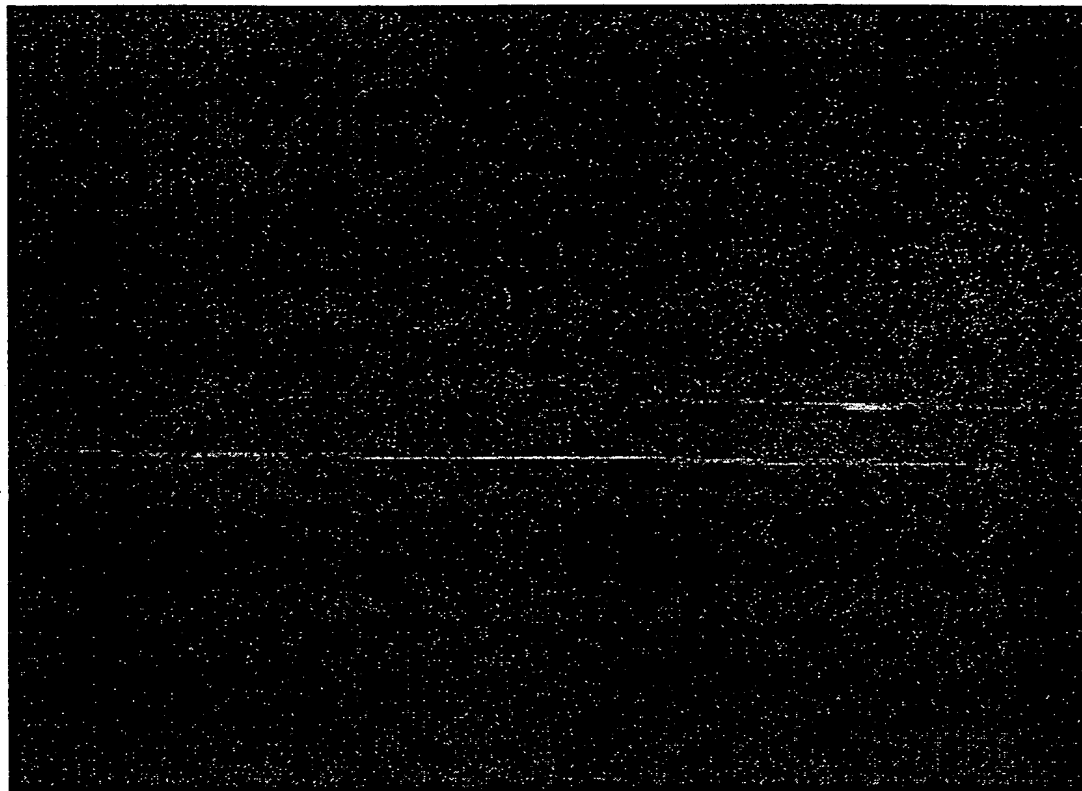


FIG. 28

10066-018

SHEET 32 OF 34

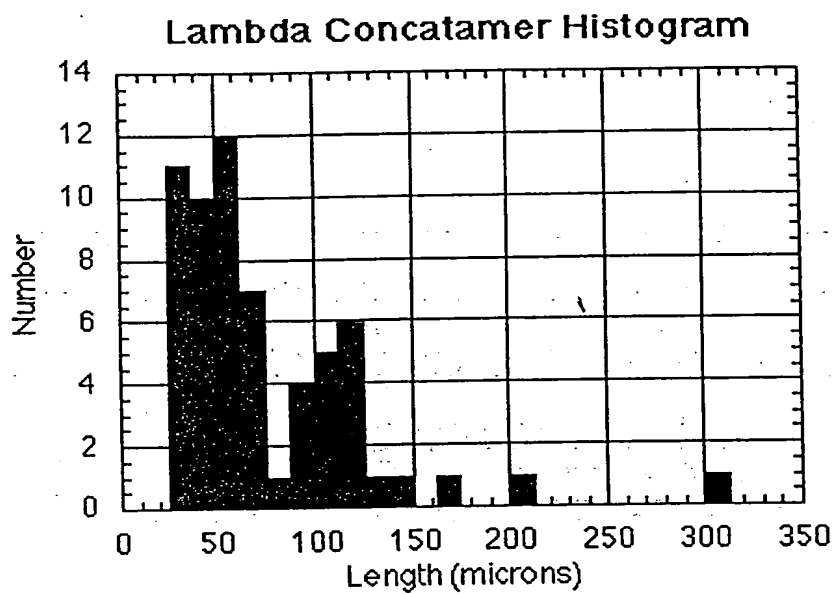


FIG. 29

10066-018

SHEET 33 OF 34

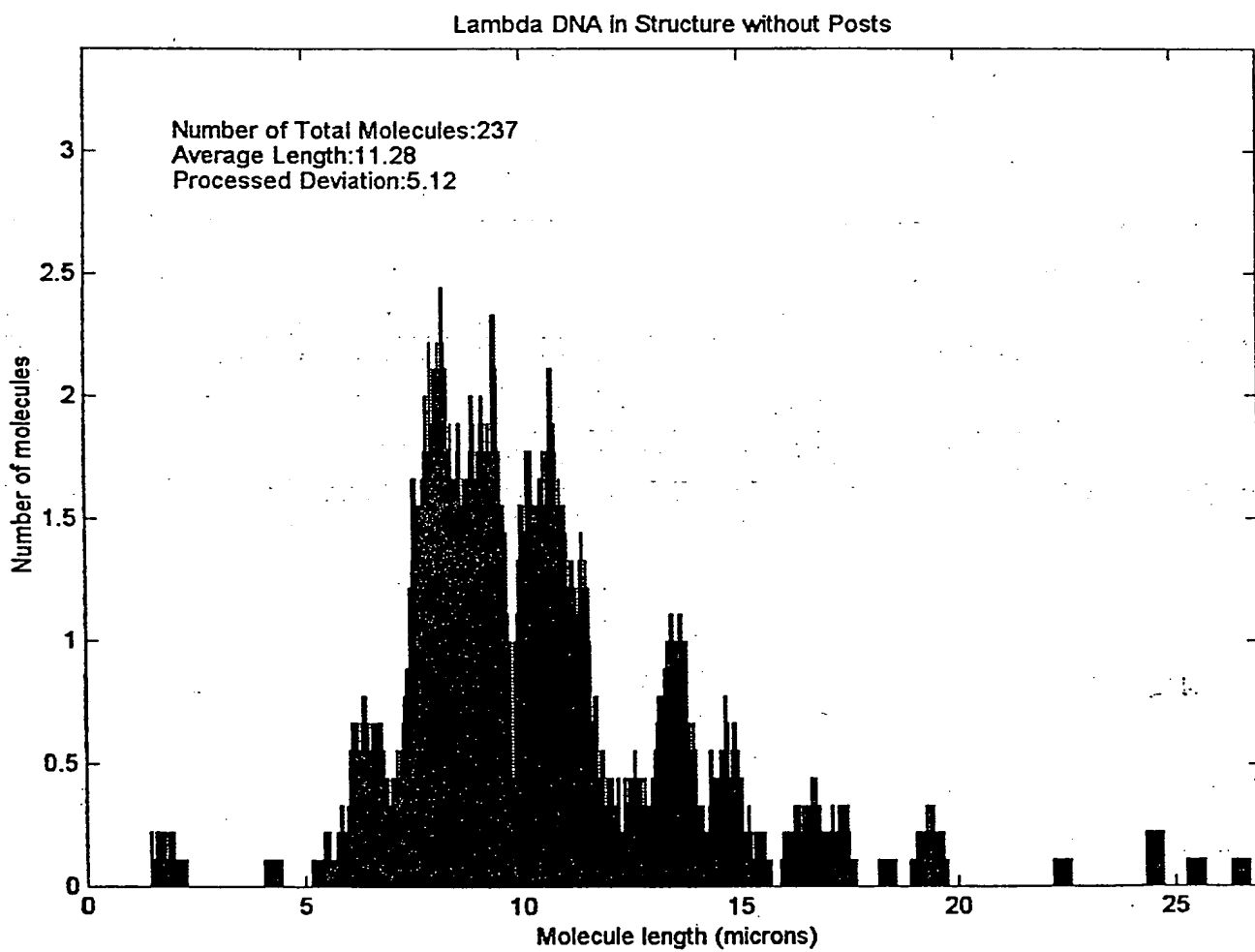


FIG. 30 (a)

10066-018

SHEET 34 OF 34

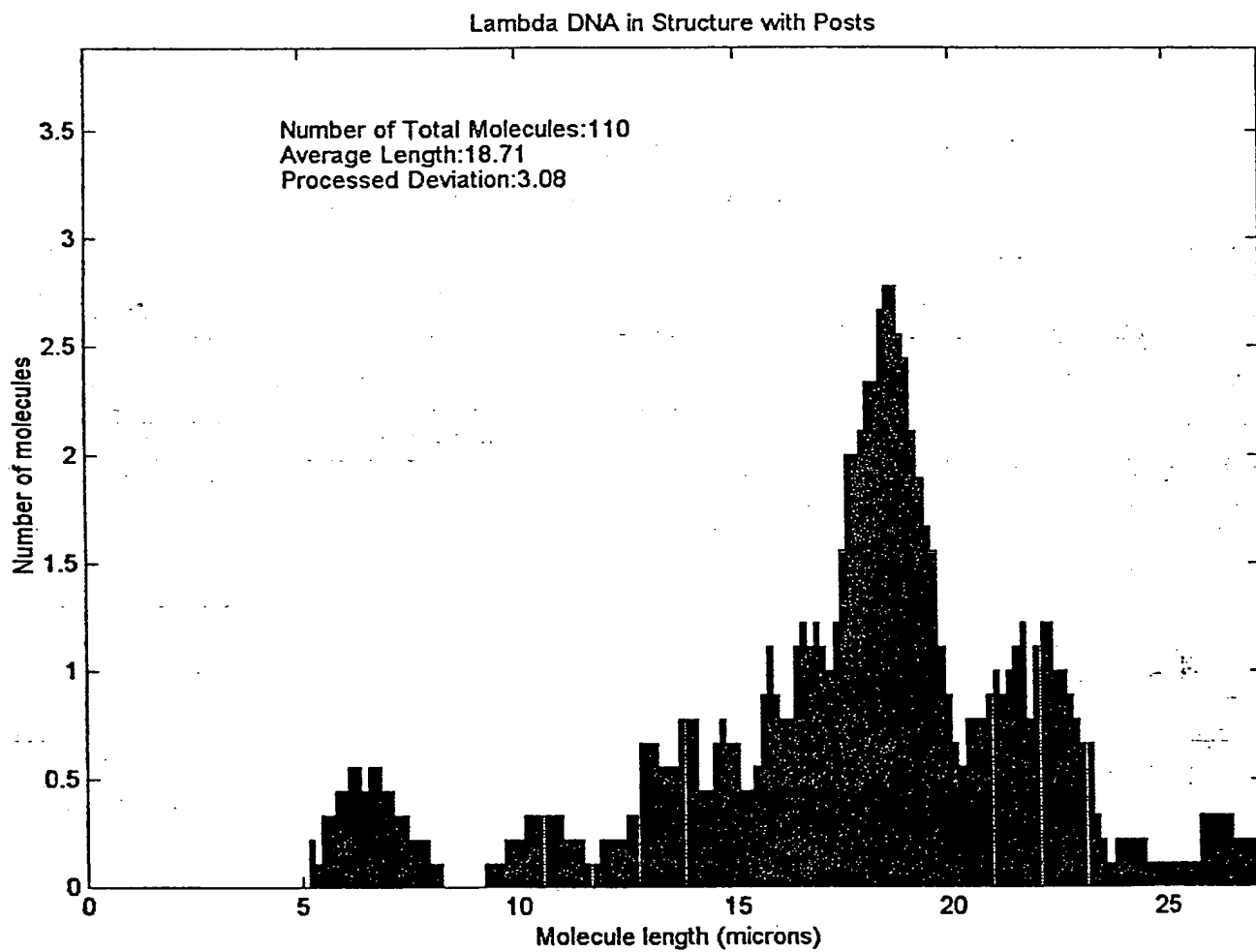


FIG. 30 (b)